

Listing of Claims

The following listing of claims will replace all prior versions, and listings, of claims in the subject application:

26. (currently amended) A liquid drop jet head, comprising:

a nozzle jetting a liquid drop;

a liquid ~~room~~ rooms connected to the nozzle;

a common liquid room connected to the liquid ~~room~~ rooms, to which the liquid is supplied from a supply opening part; wherein

a width of the common liquid room decreases with an increase of a distance from the supply opening part, and the supply opening part is placed at an end part of the common liquid room in a direction of a line of the liquid rooms.

27. (previously presented) The liquid drop jet head as claimed in claim 26, wherein the width of the common liquid room on the plane level is narrower substantially consecutively as the point of the width is more remote from the supply opening part.

28. (previously presented) The liquid drop jet head as claimed in claim 26, wherein the width of the common liquid room on the plane level is narrower substantially gradually as the point of the width is more remote from the supply opening part.

29. (previously presented) The liquid drop jet head as claimed in claim 26, wherein the common liquid room has a configuration of a single wing on a plane level.

30. (currently amended) ~~The~~ A liquid drop jet head ~~as claimed in claim 29~~ comprising:
a nozzle jetting a liquid drop;
a liquid room connected to the nozzle; and
a common liquid room connected to the liquid room, to which the liquid is supplied
from a supply opening part,
wherein a width of the common liquid room decreases with an increase of a distance
from the supply opening part,
wherein the common liquid room has a configuration of a single wing on a plane
level, and
wherein the supply opening part is provided at a wall surface side opposite to the wall surface side to which the liquid room in the common liquid room is provided, an external side of the wall surface, or an external side of the liquid room being in a direction of a line of the liquid room.

31. (previously presented) The liquid drop jet head as claimed in claim 26, wherein the common liquid room has a configuration of dual wings on a plane level.

32. (previously presented) The liquid drop jet head as claimed in claim 31, wherein a wall surface opposite to the side to which the liquid room is provided in a common liquid room has a substantially arc configuration or a semicircle configuration in a direction of a line.

33. (currently amended) ~~The~~ A liquid drop jet head ~~as claimed in claim 31~~ comprising:

a nozzle jetting a liquid drop;
a liquid room connected to the nozzle; and
a common liquid room connected to the liquid room, to which the liquid is supplied
from a supply opening part,

wherein a width of the common liquid room decreases with an increase of a distance
from the supply opening part,

wherein the common liquid room has a configuration of dual wings on a plane level,
and

wherein the supply opening part is provided at a wall surface side opposite to the side to which the liquid room in the common liquid room is provided, an external side of the wall surface, or an external side of the liquid room being in a direction of a line of the liquid room.

34. (currently amended) The liquid drop jet head as claimed in claim 26, the liquid drop jet head comprising a plurality of liquid rooms, wherein a plurality of ~~the~~ common liquid rooms is formed in a direction of a line of the liquid rooms independently.

35. (currently amended) The liquid drop jet head as claimed in claim 29, the liquid drop jet head comprising a plurality of liquid rooms, wherein a plurality of ~~the~~ common liquid rooms is formed in a direction of a line of the liquid rooms independently and the respective common liquid rooms are arranged in parallel.

36. (currently amended) The liquid drop jet head as claimed in claim 29, the liquid drop jet head comprising a plurality of liquid rooms, wherein a plurality of ~~the~~ common liquid rooms

is formed in a direction of a line of the liquid rooms independently and the respective common liquid rooms are arranged line-symmetrically.

37. (previously presented) The liquid drop jet head as claimed in claim 34, wherein a number of the liquid rooms connected to one of the common liquid room is in a range of two or more and thirty-two or less.

38. (currently amended) ~~The~~ A liquid drop jet head as claimed in claim 34 comprising:
a nozzle jetting a liquid drop;
a liquid room connected to the nozzle; and
a common liquid room connected to the liquid room, to which the liquid is supplied
from a supply opening part,

wherein a width of the common liquid room decreases with an increase of a distance
from the supply opening part,

wherein a plurality of common liquid rooms is formed in a direction of a line of the
liquid rooms independently, and

wherein the respective common liquid rooms and the liquid rooms have partition walls and a width of the partition wall between the neighboring common liquid rooms has a substantially same length as the width of the partition wall between the neighboring liquid rooms.

39. (currently amended) ~~The~~ A liquid drop jet head as claimed in claim 26 comprising:
a nozzle jetting a liquid drop;
a liquid room connected to the nozzle; and

a common liquid room connected to the liquid room, to which the liquid is supplied from a supply opening part,

wherein a width of the common liquid room decreases with an increase of a distance from the supply opening part, and

wherein the liquid rooms make a plurality of lines and the common liquid rooms for the every line of the liquid rooms are provided independently between the respective lines of the liquid rooms.

40. (previously presented) The liquid drop jet head as claimed in claim 39, wherein the supply opening part being common for the common liquid rooms for the every line of the liquid rooms is provided in the common liquid rooms so that the liquid is supplied.

41. (previously presented) The liquid drop jet head as claimed in claim 26, wherein the common liquid room is formed by anisotropically etching of a silicon substrate.

42. (previously presented) The liquid drop jet head as claimed in claim 41, wherein the common liquid room has a wall surface at a liquid room side of the common liquid room, and the wall surface has a plane configuration having an obtuse angle.

43. (previously presented) The liquid drop jet head as claimed in claim 26, wherein the supply opening part is provided at a surface opposite side to a lid member or a nozzle board forming a wall surface of the liquid room.

44. (previously presented) The liquid drop jet head as claimed in claim 43, wherein the supply opening part is formed by a mechanical process.

45. (previously presented) The liquid drop jet head as claimed in claim 43, wherein the supply opening part is formed by anisotropically etching.

46. (previously presented) The liquid drop jet head as claimed in claim 26, the liquid drop jet head further comprising a pressure generating part that generates a pressure pressurizing the liquid provided in the liquid room, wherein the pressure generating part includes a vibration board forming the wall surface of the liquid room and an electrode facing the pressure generating part so that the vibration board is deformed by an electrostatic force.

47. (previously presented) The liquid drop jet head as claimed in claim 26, the liquid drop jet head further comprising a pressure generating part that generates a pressure pressurizing the liquid provided in the liquid room, wherein the pressure generating part includes a vibration board forming the wall surface of the liquid room and an electric machine conversion element deforming the vibration board.

48. (previously presented) The liquid drop jet head as claimed in claim 26, the liquid drop jet head further comprising a pressure generating part that generates a pressure pressurizing the liquid provided in the liquid room, wherein the pressure generating part includes an electric thermal conversion element arranged in the liquid room.

49. (previously presented) The liquid drop jet head as claimed in claim 26, wherein the liquid drop jet head is used as an ink jet head, for an ink cartridge in which an ink tank supplying the ink to the ink jet head is unified.

50. (currently amended) An ink jet recording apparatus, comprising an ink jet head jetting the ink drop, the ink jet head includes

a nozzle jetting a liquid drop,

a liquid ~~room~~ rooms connected to the nozzle,

a common liquid room connected to the liquid ~~room~~ rooms, to which the liquid is supplied from a supply opening part; wherein

a width of the common liquid room decreases with an increase of a distance from the supply opening part, and the supply opening part is placed at an end part of the common liquid room in a direction of a line of the liquid rooms.

51. (new) A liquid drop jet head, comprising:

a nozzle jetting a liquid drop;

a liquid room connected to the nozzle;

a common liquid room connected to the liquid room, to which the liquid is supplied from a supply opening part,

wherein a width of the common liquid room decreases with an increase of a distance from the supply opening part, and

wherein the common liquid room has a wall surface at a liquid room side of the common liquid room, and the wall surface has a configuration of saw teeth on a plane level.

52. (new) The liquid drop jet head as claimed in claim 51, the liquid drop jet head further comprising a fluid resister part between the liquid room and the common liquid room, wherein the wall surface is placed at a common liquid room side of the fluid resister part.

53. (new) An ink jet recording apparatus, comprising an ink jet head jetting the ink drop, the ink jet head includes

a nozzle jetting a liquid drop;

a liquid room connected to the nozzle; and

a common liquid room connected to the liquid room, to which the liquid is supplied from a supply opening part,

wherein a width of the common liquid room decreases with an increase of a distance from the supply opening part, and

wherein the common liquid room has a wall surface at a liquid room side of the common liquid room, and the wall surface has a configuration of saw teeth on a plane level.

54. (new) The ink jet recording apparatus as claimed in claim 53, the liquid drop jet head further comprising a fluid resister part between the liquid room and the common liquid room, wherein the wall surface is placed at a common liquid room side of the fluid resister part.